



Material Comparison **FIBERGLASS REINFORCED POLYESTER VS POLYCARBONATE**

Choosing the Correct Material for Industrial Enclosures

When selecting enclosures for industrial use, the material they're made from plays a crucial role, especially in challenging environments. The performance and lifespan of an enclosure can be significantly affected by exposure to harsh conditions like corrosive chemicals or salty, humid air. While both products are UL and NEMA 4X listed, selecting the appropriate material is key to maximizing the longevity and performance of your application.

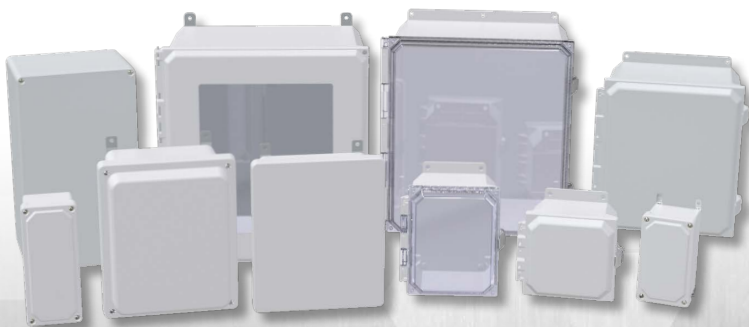
Fiberglass Reinforced Polyester: Durable and Chemically Resistant

Fiberglass reinforced polyester (FRP) enclosures deliver exceptional durability and long-term performance in the harshest environments. Similar to stainless steel, fiberglass resists corrosion against a wide range of chemicals and acids and will not rust or pit over time.

Additionally, the exclusive Ultraguard fiberglass goes a step further by offering enhanced UV protection, making it an excellent choice for the toughest outdoor applications such as:

- Solar
- Water / wastewater
- Telecom
- Carwash
- Mining
- Any other environments that are highly corrosive / extreme UV exposure.

"FRP is ideal for rugged industrial or outdoor applications"



FRP Advantages:

- *UV protection with Ultraguard*
- *Outstanding chemical and corrosion resistance*
- *Non-conductive*
- *Lightweight & strong, rigid construction*
- *High flame resistance*

For any inquiries, contact your Hammond Representative!
 USA (716) 630-7030 • CANADA (519) 822-2960

Quality Products. Service Excellence.





Material Comparison
FRP VS POLYCARBONATE

Polycarbonate: Lightweight and Adaptable

Polycarbonate enclosures offer a flexible and cost-effective alternative to fiberglass enclosures. Known for their excellent impact resistance and lightweight body style, they are well suited for NEMA 4X applications where corrosion isn't a major concern, such as:

- Automation
- Instrumentation
- Pump Controls
- Security & Communication
- Electronics

Hammond polycarbonate PCJ Series enclosures carry an F1 rating for UV exposure.



Polycarbonate Advantages:

- High impact resistance
- Lightweight
- Easy modification
- Available in clear or opaque cover styles
- High flame resistance

CORROSION RESISTANCE GUIDELINES

	Solvents	Alkalis	Mild Acids
Examples	Cleaning solvents Carbon Tetrachloride Isopropyl Alcohol Perchloroethylene Toluene Xylene	Ammonium Chloride Ammonium Nitrate Calcium Hydroxide Calcium Hypochlorite Magnesium Hydroxide Sodium Hypochlorite	Aluminum Chloride Boric Acid Calcium Chloride Potassium Nitrate Sea Water Sodium Nitrate Zinc Chloride
Recommended	PJ/PJU Series Fiberglass 304 / 316 Stainless Steel Aluminum	304 / 316 Stainless Steel	PJ/PJU Series Fiberglass PJW/PJFS Series Fiberglass PCJ Series Polycarbonate 304 / 316 Stainless Steel
Satisfactory	Painted Carbon Steel PJW/PJFS Series Fiberglass	PCJ Series Polycarbonate PJ/PJU Series Fiberglass PJW/PJFS Series Fiberglass	Painted Carbon Steel
Limited Use	PCJ Series Polycarbonate	Painted Carbon Steel Aluminum	Aluminum



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